

3. (Amended) The chimeric embryo according to Claim 1, wherein said undifferentiated immortal cells from said first animal species are embryonic stem cells.

C2  
Sub 01  
4. (Amended) The chimeric embryo according to Claim 1, wherein said embryonic cells from said first animal species are comprised of a mixture of [both] said embryonic cells and embryonic stem cells.

Sub 01  
C3  
6. (Twice Amended) The chimeric embryo according to Claim 1, wherein said undifferentiated immortal cells from said one or more second animal species are embryonic stem cells.

7. (Twice Amended) The chimeric embryo according to Claim 1, wherein said embryonic cells from said one or more second animal species are comprised of a mixture of [both] said embryonic cells and embryonic stem cells.

Sub 01  
C4  
10. (Twice Amended) A cell line isolated from a chimeric embryo comprising cells from a first and one or more second animal species, wherein said first animal species is human, and wherein said one or more second animal species is non-human primate, wherein said cells from said first animal species are selected from among the group consisting of embryonic cells, blastomere cells, blastocyst cells, undifferentiated immortal cells, pluripotent cells, and totipotent cells, [; embryonic stem cells; and a mixture of both embryonic cells and embryonic stem cells,] and wherein said cells from said one or more second animal species are selected from among the group consisting of embryonic cells, [;] embryonic stem cells; and a mixture of both embryonic cells and embryonic stem cells] , blastomere cells, blastocyst cells, undifferentiated immortal cells, pluripotent cells, and totipotent cells; wherein said cell line is immunologically tolerant to said cells from said first and said one or more second animal species.

13. (Twice Amended) A chimeric animal [derived] originating from a chimeric embryo comprising cells from a first and one or more second animal species, wherein said first animal species is human, and wherein said one or more second animal species is non-human primate, wherein said cells from said first animal species are selected from among the group consisting of embryonic cells[, embryonic stem cells; and a mixture of both embryonic cells and embryonic stem cells] , blastomere cells, blastocyst cells, undifferentiated immortal cells, pluripotent cells, and totipotent cells, and wherein said cells from said one or more second animal species are selected from among the group consisting of embryonic cells[,], embryonic stem cells[, and a mixture of both embryonic cells and embryonic stem cells] , blastomere cells, blastocyst cells, undifferentiated immortal cells, pluripotent cells, and totipotent cells, wherein said chimeric animal is immunologically tolerant to cells from said first and said second animal species.

28. (Twice Amended) A chimeric embryo comprising embryonic cells from a first and one or more second animal species, wherein said first animal species is human, and wherein said one or more second animal species is selected from among the group consisting of chimpanzee, baboon, rhesus monkey, and macaque, [domestic pig, mouse, rat, and rabbit] wherein said embryonic cells are selected from the group consisting of blastomere cells, blastocyst cells, undifferentiated immortal cells, pluripotent cells, and totipotent cells, and wherein said embryonic cells of said first and said one or more second animal species remain attached to one another and cooperate in the formation of a further developing embryo.

30. (Amended) The chimeric embryo according to Claim 28, wherein said undifferentiated immortal cells from said first animal species are embryonic stem cells.

Sub 1  
31. (Amended) The chimeric embryo according to Claim 28, wherein said embryonic cells from said first animal species are comprised of a mixture of [both] said embryonic cells and embryonic stem cells.

Sub 1  
C8  
33. (Twice Amended) The chimeric embryo according to Claim 28, wherein said undifferentiated immortal cells from said one or more second animal species are embryonic stem cells.

34. (Twice Amended) The chimeric embryo according to Claim 28, wherein said embryonic cells from said one or more animal species are comprised of a mixture of [both] said embryonic cells and embryonic stem cells.

39. (Amended) The chimeric embryo according to Claim 1, wherein said [embryo is viable] embryonic cells develop cooperatively for no longer than ten days.

40. (Amended) The chimeric embryo according to Claim 1, wherein said [embryo is viable] embryonic cells develop cooperatively for no longer than twelve days.

C8  
41. (Amended) The chimeric embryo according to Claim 1, wherein said [embryo is viable] embryonic cells develop cooperatively for no longer than fourteen days.

42. (Amended) The chimeric embryo according to Claim 1, wherein said [embryo is viable] embryonic cells develop cooperatively for no longer than twenty-one days.

43. (Amended) The chimeric embryo according to Claim 1, wherein said [embryo is viable] embryonic cells develop cooperatively for no longer than one hundred and eighty days.

C10  
53. (Twice Amended) The chimeric animal according to Claim 13, wherein said chimeric animal is non-human.

Sub 101  
C12  
59. (Amended) The chimeric embryo according to Claim 1, wherein said chimeric embryo is an aggregation of totipotent cells of said first animal species and said one or more second animal species, wherein said totipotent cells are aggregated under conditions in which said totipotent cells cooperate to form a developing embryo.

C12  
70. (Amended) The chimeric animal according to Claim 13, wherein said chimeric animal is created by means other than a xenograft of tissue from a post-gastrulation embryo or fetus into another post-gastrulation embryo or fetus.

Please cancel Claims 2, 5, 16, 29, 32, 44-48, and 56-58 without prejudice.

Please add new Claims 72-92 as follows:

--72. The chimeric embryo according to Claim 1, wherein said chimeric embryo is propagated in culture for varying periods of time.--

--73. The chimeric embryo according to Claim 1, wherein said chimeric embryo undergoes a series of developmental steps.--

C13  
--74. The chimeric embryo according to Claim 1, wherein said embryonic cells from said first and said one or more second animal species aggregate and cooperate to form a viable chimeric embryo.--

Sub 1  
--75. The chimeric embryo according to Claim 1, wherein said embryonic cells from said first and said one or more second animal species develop cooperatively.--

--76. The chimeric embryo according to Claim 1, wherein said embryonic cells from said first and said one or more second animal species cooperate to form said chimeric embryo.--

--77. A chimeric embryo comprised of human and nonhuman primate blastomeres or blastomeres and embryonic stem cells that continues to develop through the embryonic stages of development.--

NM ?  
--78. The chimeric embryo according to Claim 77, wherein said chimeric embryo contains fewer than fifty percent human cells.--

C 73  
--79. A chimeric embryo made by the process of mixing embryonic cells from a first and one or more second animal species, allowing said embryonic cells to aggregate and cooperate to form said chimeric embryo, and allowing said chimeric embryo to develop to a stage wherein said chimeric embryo can be used for studies in developmental biology, wherein said first animal species is human, and wherein said one or more second animal species is non-human primate.--

--80. The chimeric embryo made by the process of Claim 79, wherein said chimeric embryo can be exposed to a chemical compound to determine the effect of the chemical compound on the development of said embryonic cells.--

--81. The chimeric embryo made by the process of Claim 79, wherein said chimeric embryo can develop into a source of tissue for skin grafts.--

--82. The chimeric embryo made by the process of Claim 79, wherein said chimeric embryo can develop into a source of organs for transplant.--

--83. A chimeric animal derived from a chimeric embryo comprising cells from a first and one or more second animal species, wherein said first animal species is human, and wherein said one or more second animal species is non-human primate, wherein said cells from said first animal species are selected from among the group consisting of embryonic cells, blastomere cells, blastocyst cells, undifferentiated immortal cells, pluripotent cells, and totipotent cells, and wherein said cells

from said one or more second animal species are selected from among the group consisting of embryonic cells, embryonic stem cells, blastomere cells, blastocyst cells, undifferentiated immortal cells, pluripotent cells, and totipotent cells, wherein said chimeric animal contains cells derived from said first and said one or more second animal species in two or more organs.--

--84. The chimeric animal according to Claim 83, wherein said chimeric animal is non-human.--

--85. The chimeric animal according to Claim 83, wherein said animal is non-human and contains phenotypic attributes selected from among the group consisting of: bipedalism; opposable thumbs; ability to reason; ability to communicate using sign language; and ability to communicate using speech.--

213  
--86. The chimeric animal according to Claim 83, wherein said chimeric animal is used as a source for organs for transplantation.--

--87. The chimeric animal according to Claim 83, wherein said chimeric animal is used as a source of bone marrow transplantation.--

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--88. The chimeric animal according to Claim 83, wherein said chimeric animal is used as a source of tissue for grafts.--

--89. The chimeric animal according to Claim 83, wherein said chimeric animal is created by means other than a xenograft of tissue from a post-gastrulation embryo or fetus into another post-gastrulation embryo or fetus.--

--90. The chimeric animal according to Claim 83, wherein said chimeric animal is created by means other than transplantation of non-totipotent cells.--